



Express Mail Label No. EV 378 819 745 US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Deo, Yashwant M. et al.

Serial No.: 10/035637

Filed: November 7, 2001

For: HUMAN MONOCLONAL ANTIBODIES TO  
DENDRITIC CELLS

Attorney Docket No.: MXI-166CP

Group Art Unit: 1644

Examiner: Ewoldt, Gerald R.

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Dear Sir:

Applicants and their Attorney have become aware of the following publications and information, cited in an International Search Report mailed October 14, 2003 during the prosecution of PCT/US02/36036 which corresponds to the above referenced application. In accordance with 37 CFR §1.97, Applicants hereby submit these publications for the Examiner's consideration. These publications are cited on the enclosed PTO/SB/08a/b, and a copy of the Report and each publication cited thereon are enclosed as well.

This statement is not to be interpreted as a representation that the cited publications are material, that an exhaustive search has been conducted, or that no other relevant information exists. Nor shall the citation of any publication herein be construed *per se* as a representation that such publication is prior art. Moreover, the

Applicants understand that the Examiner will make an independent evaluation of the cited publications.

Under 37 CFR § 1.97(b)(3), no additional costs are believed to be due in connection with the filing of this disclosure. If, however, a first Office Action on the merits issues in this application bearing a mailing date prior to the date of this Information Disclosure Statement, please charge the appropriate fee as required under 37 CFR §1.17(p) to our Deposit Order Account No. 12-0080.

Respectfully submitted,  
LAHIVE & COCKFIELD, LLP



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Date: **July 29, 2004**

GAD/JER/DLH/kvj  
Enclosures



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PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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<b>Substitute for form 1449A/B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/035637
				Filing Date	November 7, 2001
				First Named Inventor	Deo, Yashwant M.
				Art Unit	1644
				Examiner Name	Ewoldt, Gerald R.
Sheet	1	of	1	Attorney Docket Number	MXI-166CP

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	D1	Apostolopoulos, V. <i>et al.</i> "Ex vivo targeting of the macrophage mannose receptor generates anti-tumor CTL responses." <i>Vaccine</i> 18(27):3174-184 (2000).	
	D2	Wallace, P.K. <i>et al.</i> "Exogenous antigen targeted to FcγRI on myeloid cells is presented in association with MHC class I." <i>J. Immunol. Methods</i> 248 (1-2):183-94 (2001).	
	D3	Nouri-Shirazi, M. <i>et al.</i> "Dendritic cells capture killed tumor cells and present their antigens to elicit tumor-specific immune responses." <i>J. Immunol.</i> 165:3797-3803 (2000).	
	D4	You, Z. <i>et al.</i> "Targeting dendritic cells to enhance DNA vaccine potency." <i>Cancer Res.</i> 61:3704-3711 (2001).	
	D5	Berard, F. <i>et al.</i> "Cross-priming of naïve CD8 T cells against melanoma antigens using dendritic cells loaded with killed allogeneic melanoma cells." <i>J. Exp. Med.</i> 192(11):1535-43 (2000).	

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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
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APPLICANT FACSIMILE OF FORM PTO-1449 REV 7-80  <b>LIST OF PUBLICATIONS CITED BY APPLICANT</b> (Use several sheets if necessary)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO <b>MXI-166CP</b>	SERIAL NO. <b>10/035637</b>
		APPLICANT <b>Yashwant M. Deo et al.</b>	
		FILING DATE <b>November 7, 2001</b>	GROUP

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	A1	4,474,893	10/84	Reading	436	547	
	A2	4,946,778	08/90	Ladner et al.	435	69.6	
	A3	4,954,617	09/90	Fanger et al.	530	387	
	A4	5,455,030	10/95	Ladner et al.	424	435.1	
	A5	5,476,786	12/95	Huston	435	252.33	
	A6	5,545,807	08/96	Surani et al.	800	2	

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	A7	WO 86/01533 A1	03/86	PCT				
	A8	WO 88/00052 A1	01/88	PCT				
	A9	WO 92/03918 A1	03/92	PCT				
	A10	WO 94/10332 A1	05/94	PCT				
	A11	WO 98/24884 A1	06/98	PCT				

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

	A12	Bird et al. (1988) Single-chain antigen-binding proteins <i>Science</i> 242:423-426
	A13	Brennan et al. (1985) Preparation of bispecific antibodies by chemical recombination of monoclonal immunoglobulin G1 fragments <i>Science</i> 229:81-83
	A14	Galfre et al. (1997) Antibodies to major histocompatibility antigens produced by hybrid cell lines. <i>Nature</i> 266:550-552
	A15	Glennie et al. (1987) Preparation and performance of bispecific F(ab' gamma)2 antibody containing thioether-linked Fab' gamma fragments <i>J. Immunol.</i> 139: 2367-2375
	A16	Karpovsky et al. (1984) Production of target-specific effector cells using hetero-cross-linked aggregates containing anti-target cell and anti-Fc gamma receptor antibodies <i>J. Exp. Med.</i> 160:1686-01
	A17	Liu et al. (1985) Heteroantibody duplexes target cells for lysis by cytotoxic T lymphocytes <i>Proc. Natl. Acad. Sci. USA</i> 82:8648
	A18	Lonberg et al. 1994. Antigen-specific human antibodies from mice comprising four distinct genetic modifications <i>Nature</i> 368(6474): 856-859
	A19	Monteiro et al., (1992) Molecular heterogeneity of Fc alpha receptors detected by receptor-specific monoclonal antibodies <i>J. Immunol.</i> 148:1764-70
	A20	Paulus (1985) Preparation and biomedical applications of bispecific antibodies <i>Behring Ins. Mitt.</i> No. 78, 118-132
	A21	Ward et al. (1989) Binding activities of a repertoire of single immunoglobulin variable domains secreted from <i>Escherichia coli</i> <i>Nature</i> 341:544-6

Examiner

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